ATTACHMENT E – STATEMENT OF WORK

WATER SYSTEM MASTER PLAN

TOWN OF WHITESTOWN, INDIANA

This Statement of Work is executed as of the _____day of _____, 2017 by and between the Town of Whitestown ("Whitestown") and ms consultants, inc. ("Engineer"). Whitestown and Engineer agree that all of the Services authorized by this Statement of Work shall be subject to the terms and conditions set forth within the Uniform Contract for Services for General Engineering Services between Whitestown and Engineer dated September 14, 2016 (the "Master Agreement"). Upon execution of this Statement of Work, the Master Agreement shall be incorporated into and be considered a part of this Statement of Work as if set forth herein in its entirety. Any capitalized terms which are not defined herein shall have the meanings defined in the Master Agreement.

SCOPE OF WORK – WATER SYSTEM MASTER PLAN (WSMP)

The following is the proposed Scope of Work to develop a Water System Master Plan for the Town of Whitestown, Indiana. This plan will be an update to the existing Water System Master Plan dated August 2012. The following are the work items associated with the Water System Master Plan:

1. Compilation and Review of Existing Data and Reports

Obtain information on the existing system including production, storage, and distribution facilities. Engineer, along with the Town, will identify, collect, review, and assess all available engineering reports, Insurance Services Office (ISO) reports and other available reporting. Additionally, Engineer will meet with Town staff and review all existing data as it pertains to the water system throughout the Town. This data will be used to establish water use characteristics for the Town.

2. Flow Projection Development

Growth projections will be developed using the Town's reporting, U.S. Census data, and land use/zoning maps. Any additional information from the Town Staff regarding industrial, commercial, and residential developments that may have any bearing on the projections will be integrated. The growth projections will include an outlook for a minimum of 20-years as negotiated with the Town.

3. Level of Service

The level of service required to develop the project will include well established performance criteria for water distribution system components. The following are examples of performance measures to be included for water distribution systems:

- Source pressures and flows
- Flow testing records

- Pressure testing records
- Fire flow demands
- Customer flow demands
- Identification of top 10 users in the system
- Identification of production & storage requirements/limitations
- Number of line breaks
- Customer service calls
- Percentage of problems cleared per month
- Value of capital additions/net asset value

4. Hydraulic Modeling

Engineer shall develop a hydraulic model of the existing water distribution system. This model will be used to evaluate the existing system for deficiencies and limiting service factors. Future growth projections will be included in the model to develop future growth areas and identify restrictions in the system. Included in this item are two (2) work sessions with Town Staff to achieve the following:

Work Session No. 1:

- Review the existing system model results;
- Identify the most critical needed fire flows;
- Identify service area additions that are likely to be included in the planning period;
- Estimate the water demands on the system at the end of the planning period;

Work Session No. 2:

- Review the future system model results;
- Review proposed capital improvement projects;
- Prioritize capital improvement projects.

5. Project Prioritization and Cost Estimates

The Engineer shall develop preliminary cost estimates for projects recommended in the master plan. These estimates will be used, in conjunction with Town Staff input, to prioritize projects in the master plan. Projects will be prioritized as short term (1-5 years), intermediate term (5-10 years) and long term (10-20 years). This will aid the Town in the identification and development of future funding mechanisms for the projects.

6. Water System Master Plan (WSMP) Report

The Water System Master Plan (WSMP) report shall include the following components:

a. Evaluation of the Existing System Condition;
b. Evaluation of the Future Flow Projections for the System;
c. Evaluation of Source Water Options;
d. Proposed Distribution System Projects w/ exhibits;
e. Project Schedules and Estimated Costs;

Scheduling

Engineer will begin performing the services following execution of this Scope of Work. The projected project timeline is as follow:

Task	Start*	Finish*
Compile and Review Existing Data & Reports	October 2017	November 2017
Flow Projection Development	November 2017	November 2017
Level of Service	November 2017	December 2017
Hydraulic Modeling	December 2017	January 2018
Develop Distribution System Alternatives	January 2018	February 2018
Evaluate Source Water Options	January 2018	February 2018
Project Prioritization & Cost Estimates	February 2018	February 2018
Water System Master Plan (WSMP) Report	February 2018	March 2018

Total Lump Sum Fee for items listed above = $70,000.00

Effective Date. The Effective Date for this Agreement shall be the date as stated at the top of the Attachment E to the Uniform Contract for Services.

IN WITNESS WHEREOF, the parties hereto have executed this Statement of Work to be effective as of the Effective Date.

WHITESTOWN:	ENGINEER:
Town of Whitestown	ms consultants, inc.
By: _____	By: _____
Name: Dax Norton	Name: Daniel R. Cutshaw, P.E.
Title: Town Manager	Title: Director of Indiana Operations